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(Amended) A method for fabricating a silicide for a silicon region, said method comprising: depositing a metal containing silicon or an alloy thereof on a bulk silicon substrate; reacting said metal containing silicon or said alloy to form a first silicide phase; etching any unreacted metal containing silicon or alloy; depositing a silicon cap layer over said first silicide phase; reacting the silicon cap layer to form a second silicide phase; and etching any unreacted silicon from said silicon cap layer.

8. (Amended) The method of claim 4, wherein said reacting of said metal comprises performing a first rapid thermal anneal (RTA) to form a metal-silicon phase, such that the deposited metal containing silicon with the underlay Si, converts some of the Si into metal-Si,

wherein said elching comprises selectively etching any unreacted metal containing silicon, thereby leaving the metal-silicon regions intact,

wherein said depositing comprises performing a blanket deposition of a silicon film, and wherein said reacting of said silicon cap comprises performing a second RTA to form a

metal di-silicide

(Amended) A method for fabricating a silicide for a silicon region, said method comprising: depositing a metal or an alloy thereof on a bulk silicon substrate; reacting said metal or said alloy to form a first silicide phase; etching any unreacted metal or alloy;

depositing a silicon cap layer over said first silicide phase; reacting the silicon cap layer to form a second silicide phase; and etching any unreacted silicon from said silicon cap layer, wherein said metal is co-deposited with silicon.

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(Amended) A method for fabricating a silicide, said method comprising:

providing a substrate having a silicon layer;
depositing a metal containing silicon or an alloy over said silicon layer;
reacting said metal containing silicon or said alloy to form a first silicide phase;
etching any unreacted metal containing silicon or alloy; and
depositing a silicon cap layer over said metal containing silicon or said alloy;
reacting the silicon cap layer, to form a second silicide phase; and

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25. (Amended) A method for fabricating a silicide for a semiconductor device, said method comprising:

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depositing a metal or an alloy thereof on a silicon substrate;

reacting said metal or said alloy to form a first forming silicide phase;

etching any unreacted metal or alloy;

depositing a silicon cap layer over said first forming silicide phase;

reacting the silicon cap layer to form a second silicide phase, for said semiconductor device; and

etching any upreacted silicon from said silicon cap layer.

etching any unreacted silicon from said silicon cap layer.

26. (Amended) A method for fabricating a silicide for a silicon region, said method comprising:
depositing a metal containing silicon or an alloy thereof on a bulk silicon substrate;
reacting said metal containing silicon or said alloy to form a first silicide phase;
etching any unreacted metal containing silicon or alloy;
depositing a silicon cap layer over said first silicide phase;
reacting the silicon cap layer to form a second phase; and
etching any unreacted silicon from said silicon cap layer, wherein said metal is nickel.